After Walter Benjamin’s thoughts on the loss of aura in the age of technical reproducibility, what could one add to his memorable analysis of the waning of the affect (of an original aura) in what was to become, long after his passing, the age of digital social media? An image is captured and posted online at the same time, already always reproduced. It appears to have lost all claims to its factness and living vitality, in this instant dispersion into the technologized mediated hinterlands, the time–spaces of the virtual, the vastnesses.

Aura is a sentimental idea. But I wish to claim the aural-auratic and perhaps also aerial phenomenon that survives in the later, ritual times we now face in the post-Anthropocene. In this geological time frame, performance scenographies move closer to an aesthetic exploration of atmospheres, climates, fluid weather-worlds and constellations. I argue that they learn how to fly or make us imagine that we fly on the same aerial currents that animate the kites of the Palawan Highlanders evoked in Tim Ingold’s astonishing retelling of the tale of their becoming like birds (2011: 135).

I will sketch some constellations, as evocation of creative research engaged with kinetic architectures for moving bodies in affective environments. Geologically speaking, I cannot predict whether any such scenographic ideas have longevity, although it would seem that open, affective environments have existed since ancient times when sacred dramatic festivals took place in amphitheatres, sanctuaries and temples (for example, Javanese Wayang kulit shadow puppet plays were staged in village cemeteries).

Theoretical discourse on atmospheres is fairly recent, derived from philosophy (Sloterdijk, Böhme), cultural geography, spatial studies and architecture (Philippopoulos-Mihalopoulos 2015; Pallasmaa 2014; Zumthor 2006; Thibaud 2011). It may vanish again into a shadowless culture where, as Artaud once suggested when he lamented the fossilized theatre, we meet nothing while space is full.

The fullness of the real returns in unlikely places, for example, the densely sensorial atmospheres of performance rituals we attend or long to rediscover. In the current experience economy, immersion and collective experience radiate. Exploring such contagious material conditions, our ensemble have become builders. In a recent rehearsal, after having suspended huge amounts of delicate, sensual gauze and white fabric from the ceiling of a warehouse space, attached to aerial wires that allow the fabrics to fly, I watched how dancer Yoko Ishiguro slowly emerged, like an amphibian creature, from under the fabrics, still shrouded by them and extending the large dress so that it stretched out almost the whole length of the building. As we walked around, trying to disentangle with eyes, ears and sensory touch what was un-folding, a tiny sound was heard coming from the cone-shaped origami object she held in her hand: a sound instrument, reflecting dimly the blue light that shone on it.
We call it ‘Kepler’, named after the recently discovered 452b exoplanet and constructed by my design collaborator Michèle Danjoux out of the same polypropylene origami material as the costume for one of the dancers. The costume was, in turn, inspired by an interactive architectural-spatial structure we had been asked to perform with.\(^2\) Materials, in other words, moved and became transformed, from architectural animation to wearable, from sounding/conductive costume to sound-object-choreography – re-contextualized kinetic characters and accessories. Performing (with) architecture, then, is one of the challenges I propose here for embodied scenography. How does scenography and movement choreography enjoin with spatialities both material and virtual? How do we become ensounded in their orbiting?

**Engineering Atmospheres/Human and Non-Human Materialities**

The theatre’s relation to engineering of atmospheres is commonplace, having been adopted as a paradigm for such operations by philosophers or architectural theorists from Vitruvius to Gernot Böhme. Spatial performance, music in particular, generates affective tonalities and perceptual resonances that can link to metaphysical concepts such as the ecstatic; Böhme suggests that ecstatic materialities adhere to properties of things, and vibrant matter emerges along with what actors do or designers fill the stage with (1995:33). There are many examples (in the European context at least since Appia, Craig and Piscator) of theatrical spaces filled with tensions, their intensity contours tuned with uncanny, unnerving or soothing affect, with compelling rhythms, presences. Scenographic exhibitions at the Prague Quadrennial (PQ) have revealed such affective tonalities in works of designers who do not just build sets. Installations such as Tomás Saraceno’s *Biospheres* or Olafur Eliasson’s *Mediated Motion* or *The Weather Project* have drawn special attention to lighting, colour, air and liquidity of materials, whereas sound artists, for example, the Finnish group who created *WEATHER STATION*\(^3\) for PQ ’15, have been equally drawn to changing auralities subject to environmental conditions, harking back to John Cage’s aleatory concept of music as weather, inspired by his study of Zen and nature processes. Observers have pointed to German stage designer Katrin Brack’s recent productions, her minimalist yet excessive use of single materials – fog, foam, snow, confetti, balloons (cf. McKinney 2017). The use of stage fog as a special effect is common, but Brack’s filling the space continuum with dense and uncontrollable fog throughout (*Ivanov, Berlin Volksbühne, 2005*) alters conditions, making the fog a performer, so to speak, thus requiring the actors to improvise with the material spatial atmosphere, the ‘weather’ conditions as they evolved and changed, hovering, drifting.

Such hovering presences, where atmosphere also appears uncontrollable, emergent and not engineered, evoke complex ontological and spiritual questions, and the wildness of nature – I remember growing up as a child of the countryside, dark forests and steep hills – is perhaps harboured deep inside our skin and bones, our muscle memory, internal perception and emotional conditioning. The wildness may also be imaginary – the forests, hills and the fog a scenography of ghost stories, myths and fairy tales with which I grew up and that is refreshed when I am exposed to the smell of moss, the touch of mist on my skin or the aura of diffused light when sun beams flicker through tree branches, and hundreds of flies somersault.

The production of such atmospheric-auratic conditioning through design, with the phenomenological impact on sensory perception and also ethical perspective, namely how to react to affective presences and interact with lurking...
environments, thus points to an assemblage of becomings already explicitly at work in Cage’s *Lecture on the Weather* (1976) that, on the one hand seemed unintentional (chance operations performed on Thoreau’s *Walden* and *On Civil Disobedience*) while on the other gathered a storm of text fragments, images, music, voices and lighting.

There was a score, then, in Cage’s aspirational lecture, and so we can also think of atmospherically orchestrated scenographies as audible-visceral environments that are not seen from the outside but are shared, taken in – they are meant to overtake us, perhaps in the sense of shamanic rituals where spirits are invoked to inhabit and possess us, heal us with their powers or make us dwell in a shared circle of continuous community (along with the ancestral spirits). The corporeal dimension of felt environment infused some of the most striking butoh dance performances I have seen. In the case of Min Tanaka’s teachings (working on his farm in Hakushu village), the technique became known as *body weather*, and although it is hardly a design technique, it does reveal a deliberate incorporation of intersecting with landscape, an *intercourse with weather* as Tanaka has called it, and thus an attunement to vital material forces and temperatures, accommodating change. As I once dedicated ‘The Un-Seeing Eyes of the Foot’ to Kazuo Ohno in *Performance Research* 17:2 ‘On Foot’, I here wish to evoke the 73-year-old Tanaka’s silent sounding out of a bodily scenography, still and yet vibrating with vaporous promises as if permeated by boundless, ephemeral and undefined materiality, the flows and ‘imaginary landscapes’ beyond music that Cage also had conjured.

It happened on a weekend in March 2017, after spending time at London’s Tate Modern wanting to explore the Switch House, the new addition built on top of the rediscovered oil tanks of the Boiler House that became Tate. On the south terrace, outside the Switch, Fujiko Nakaya had created a sound installation made of fog. When in action, and you step inside, you get wet, children hopping around, laughing into the mists, screaming with pleasure as children do, and parents diligently taking photos of the screamers. A thin young man fidgeted with his long selfie-stick until he managed to photograph himself in the fog. Nakaya, a pioneer of installation/video art in Japan, had engineered the fog sculpture with tiny pneumatic nozzles spouting compressed water mist. The fog acts as a barometer, reading shifts in atmospheric conditions, reacting to the environment and rendering it palpable to viewers. The fog was further animated by a light-and-sound-scape by Ryuichi Sakamoto and Shiro Takatani. And then, just as dusk fell, from nowhere suddenly Min Tanaka, the butoh master, appeared and danced into and out of the fog, disappearing like the ghost of an old samurai. There were moments when he seemed to just stand still, swayed by invisible winds, as the mist swirled slowly around the figure...
that was silhouetted against the back light, a shadow visitor inside the city walls, a guest of this atmosphere of a ‘ruptured continuum’: once inside the atmospheric, you cannot see the outside (Philippopoulou-Mihalopoulou 2015:139).

This atmosphere of the performance just described is an assemblage. A different assemblage emerged the following evening, when Phill Niblock performed a 3-hour concert of his music and multi-screen films (Environment III) in one of the oil tanks, a huge coliseum-like structure built of concrete, a perfectly contained haunting acoustic chamber for Niblock’s very loud drone music filled with microtones of instrumental timbres that generate many other tones in the performance space. Niblock engineers twenty-four track digitally processed monolithic drones, with sound movement that is geologically slow, changes are nearly imperceptible. This was a reverberating assemblage that created a sublime collective flow-through, microtonal movement from body to body, and from-between various materialities and conditions of the collective.

**Changing repertoires/the expanded scenographic**

In conclusion, I take these ideas of emerging atmospheres into the political questions posed by the METABODY project, wondering whether the auratic-aural dimensions I suggested are applicable in the sense in which Olafur Eliasson imagines the control of affective movement:

Like the weather, atmospheres change all the time and that’s what makes the concept so important. An atmosphere cannot be an autonomous state; it cannot be in standstill, frozen. Atmospheres are productive, they are active agents. When you introduce atmosphere into a space, it becomes a reality machine. (Eliasson 2014:93)

The idea of a reality machine is ambiguous, as Eliasson is aware of materials and their psychosocial content, and admits that productions of atmosphere are manipulative. It is also suggested that atmospheres can be made explicit (say, if they are normative) or ruptured, implying a Brechtian approach to becoming-atmosphere, pointing up its machining, its product-ness and not-inescapable social choreographic.

METABODY took as its premise that bodily motion and non-verbal communication, understood as changing repertoires of emotional expression and cognition, constitute a fluid matrix of embodied knowledge in permanent formation. The in-forming diversity, however, is being undermined by the impact of information technologies that induce an unprecedented standardization of non-verbal, bodily and kinaesthetic communication processes. The METABODY project claims that a sustainable diversity is also undermined by the ways in which design, in an expanded sense (including Robotics, Biometrics, Virtual Reality, Human–Computer Interaction, Ergonomics and Artificial Intelligence (AI)), reveals a problematic attempt to simulate and repeat reduced repertoires of human emotions.
This may suggest that the reality machine tenders repetitious and homogenizing scenographies (the aestheticized spectacular) whereas I was arguing on behalf of the sensual, the poetic and the subliminal. DAP-Lab’s kimosphere no. 4 introduced stations in a larger theatrical architecture in which the real and the virtual merge, listening to one another, with the virtual complementing the real in a tangible way as these realities are layered on top of and within one another. Augmented virtuality is introduced by a poetry game, ‘Red Ghosts’, which can be played at a console by each visitor so inclined, their feet stepping on real leaves and twigs. The layering invites different experiences for each audience member, creating a sense of their own emerging views as they construct a narrative that may flow through the collective body of the audience. The poetry is also heard: a voice recording about lemurs – the moonlit acrobats of Shadows of the Dawn (a field report by primatologist Alison Jolly in Madagascar) – forming an allegory of evolutionary migration, evoking the notion of slow time/slow space that was pertinent for the temporally extenuated experience we had devised for the theatrical environment of kimosphere no. 4. The atmosphere and the audience are the scenographic machine; the audience produces a sense of immersion for themselves, tuning into (or out of) a forest of sensorial stimuli they instantiate into their immersive experience of the installation.

Sound and tactile materials move these kinetic stories, disseminate them around the architecture of the whole, with voices, electronic sounds, echoes, processed natural sounds, distorted crackles and hisses, lights, mists, colours and moving textures. The eight-channel installation, with each speaker shrouded in a mosquito net suspended from the ceiling grid, maps a kind a metaphorical forest of ghostly presences (three dancers, wearing masks, are hidden inside this environment, still or barely moving), with dense layers of a sound-in-motion that is experienced by visitors while moving around the forest of speakers – the micropolyphanies in fact only audible if they move across and between the nets, listening and absorbing. There are also stations on the perimeter: a virtual reality (VR) headset (goggles) and five lighter cardboard 3D headsets (with inserted iPhone); an igloo-like Soundsphere where visitors crawl inside to explore a galvanic skin response (GSR) biosignal interface (listening to galvanic skin response turned into sound); and a coral reef sculpture where they can lie down and float inside a deep-sea film projection that percolates over a synthetic origami architecture.

The ritual-communal aspect of immersion and participatory art is an important concern; otherwise there would be no reason to experiment with these forms of interaction. Atmospheres of choreographic design suggest a scenographic strategy involving the audiences stepping inside and coming closer, touching, listening and acting in greater intimacy with unfolding actions. Our kinetic atmospheres are living, breathing spaces; not clearly definable, they are currents felt through sonorous, tactile perceptions. One is corporeally present in them, moving through their Stimmungen (the German word Stimmung, similar to Atmosphäre, implies in its etymological origin also Stimme, that is, voice, an acoustic experience, a tuning), perceiving-listening to the
relational, dynamic states of such kimospheres. The surfaces and media require a creative investment from the audience, particularly obvious in the case of the VR ‘accessories’ that need to be worn.

From projection to immersion – it is not a big shift as projections are still a part of the installation architecture. 3D film or VR remains a cinematic projection medium, yet it has enhanced its plasticity and the illusion of absorption (of the viewer feeling being inside rather than looking from the outside in). 3D interaction designers argue that such absorption – and what our collaborator Doros Polydorou refers to as the perception of being physically present in a non-physical world – relies on the plausibility illusion, namely that you are not only using your body to perceive in the way you normally do, but that the environment believably responds to your actions to make you think it is real. DAP-Lab’s research on formative and wearable space (cf. Danjoux 2014; Birringer 2010), on mediated and yet highly visceral environments that are not constructed in a stable form but evolve through movement, now provides the basis on which I propose to look at current ideas about immersion-dance, perhaps also questioning those notions of plausibility. The kinetic, in my mind, also includes the motion of light and graphic projection, the diffusion of sound waves, energy fields, colour fields, implausible edgespaces and anomalies, and various forms of embedded motion sensing that result in environmental reactions.

This idea of choreographic wearables I conjoin with the exploration of aural-aural scenography, implying a material-sensory practice filtered through fashion design – making costumes, architectures, analogue and digital accessories immersive and thus wearable. This expanded choreographic materially reproduces itself even when there is only breath. Breath not only moves space – inhaling/exhaling, expanding/contracting – but also is audible. In all kimosphere installations the biophysical, etheric sound is amplified. The elemental thereness of the environmental atmosphere includes the audience as experiencers who are ‘inside’ the atmosphere, and the atmosphere is in them. Both, so to speak, reciprocally make up the ecstatic materialities of the interaction (for example, the porous gauze of the ghost speakers, or the fabrics and veils that link architecture to costumes: the insides-outsides or ‘interskins’ as Haein Song, one of our dancers, called them).

Their critical exploration would be the choreography: it includes intimate personal (meditative) resonances derived from the floating ‘coral reef’ and the ‘Red Ghost’ poetry game.
Then there are the VR interfaces where visitors enter ghostly worlds via goggles. *kimosphere no. 4* thus combines two atmospheres, real architectural space and virtual (computational) space, both actuated through the same tactile narrative, neither perhaps quite plausible.

The critical aspect for us is the immersant’s sensory participation: the resonances of real and virtual spaces are rhythmically entwined. The occurrent gestures become reciprocal: pushing the kinaesthetic into a perceptual virtuality (VR) that so far is largely contained in the visual (the ergonomic challenges with VR headsets are well known; such accessories are tethered with thick cables to computers). But also feeding the virtual ‘play’ back to the corporeal, pouring it back into the player’s gestural action (fig. 8). The kinematic is the challenge for a VR scenography that does not insulate/isolate the immersant but allows for an expanded synaesthetic perspective and embodiment where imagined full-body perceptual virtuality feeds back into the kinaesthetic. The momentary insulation from other visitors or friends, during *kimosphere no. 4*, turned out not to be a problem: everyone seemed patient, waited their turn, observed, chatted and commented upon one another’s ‘choreography’ of walking into the lemurs’ forest, flying up in an attempt to catch a glimpse of the moonlit acrobats.

**REFERENCES**


